LISTING OF CLAIMS:

Please amend the claims as follows:

1. (Original) A method for distributed optical performance monitor in a network, comprising:

selecting a frequency range based on network traffic protocol and transmission rate;

sampling a plurality of points continuously at a frequency;

computing the average power of the plurality of points;

computing a Fast Fourier Transform to obtain a spectrum in frequency domain;

computing a noise spectrum density from the spectrum and the frequency range; and

computing an optical signal noise ratio (OSNR) from the noise spectrum density and the average sampled points.

2. (Original) The method of Claim 2, further comprising computing an average optical power from a pre-saved calibration table.

3. (Original) A method for distributed optical performance monitor in a network, comprising:

calculating a noise spectrum density from a spectrum and a frequency range; and

computing an optical signal noise ratio (OSNR) from the noise spectrum density and a predetermined calibration data.

4. (Original) The method of Claim 3, prior to the calculating step, further comprising computing a Fast Fourier Transform and obtaining a spectrum in frequency domain.

5. (Original) The method of Claim 4, prior to the computing of the spectrum frequency domain, further comprising computing an average power of the plurality of points.

6. (Original) The method of Claim 5, prior to the computing step of the average power of the plurality of points, further comprising sampling a plurality of points continuously at a frequency.

7. (Original) The method of Claim 6, prior to the sampling step, further comprising selecting a frequency range based on network traffic protocol and transmission rate.

8. (Original) The method of Claim 3, wherein the computing of the OSNR is based on the following equation:

$$OSNR = \frac{P_{sig}}{P_{asc}} \frac{B_o}{R}$$

where the symbol "P_{sig}" denotes a signal power, the symbol "P_{asc}" denotes an Amplified Spontaneous Emission (ASE) power, the symbol "B_o" denotes a filter band width, and the symbol "R" denotes a wavelength resolution.

9. – 14. (Cancelled)